



DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY  
AFFAIRS (PERA)  
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208

Miami, Florida 33175-2474

T (786) 315-2590 F (786) 315-2599

[www.miamidade.gov/building](http://www.miamidade.gov/building)

## NOTICE OF ACCEPTANCE (NOA)

Willard Shutter Company, Inc.  
4420 N.W. 35<sup>th</sup> Court  
Miami, Florida 33142

### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

**DESCRIPTION:** 0.050" Aluminum Storm Panels Shutter

**APPROVAL DOCUMENT:** Drawing No. 12-008, titled "0.050" Aluminum Storm Panel", sheets 1 through 7 of 7, prepared by EngCo. Inc., dated January 25, 2012, signed and sealed by Pedro De Figueiredo, P.E., on April 10, 2012, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING:** Large and Small Missile Impact Resistant

**LABELING:** Each panel shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA revises and renews NOA #09-0528.01 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.

MIAMI-DADE COUNTY  
APPROVED

*Helmy A. Makar*  
05/24/2012

NOA No. 11-1207.09  
Expiration Date: 12/07/2016  
Approval Date: 05/24/2012

Page 1

**Willard Shutter Company, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0221.01**

**A. DRAWINGS**

1. *Drawing No. 06-022, titled "0.050" Aluminum Storm Panel", sheets 1 through 7 of 7, prepared by EngCo. Inc., dated September 17, 2006, signed and sealed by Pedro De Figueiredo, P.E., on September 17, 2006.*

**B. TESTS**

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test of 0.050" aluminum storm panels, prepared by American Test Lab of South Florida, Report No. 0109.01-06, dated February 07, 2006, signed and sealed by William R. Mehner, P.E.*
2. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test of 0.050" aluminum storm panels, prepared by American Test Lab of South Florida, Report No. 1206.01-00, dated May 02, 2001, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E.*

**C. CALCULATIONS**

1. *Comparative Analysis, Anchor Calculations and details for 0.050" Aluminum Storm Panels, dated February 15, 2006, pages 1 through 19, prepared by Engco, Inc., signed and sealed by Pedro De Figueiredo, P.E., on February 15, 2006.*
2. *Comparative Analysis, Anchor Calculations and details for 0.050" Aluminum Storm Panels, dated September 17, 2006, pages 1 through 24, prepared by Engco, Inc., signed and sealed by Pedro De Figueiredo, P.E., on September 17, 2006.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Building Code Compliance Office.*

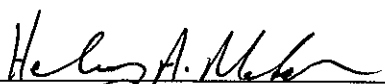
**E. MATERIAL CERTIFICATIONS**

1. *Certified Tensile Test Report by QC Metallurgical, Inc., Report No. 6AM-39, dated January 20, 2006 for 3 samples #0109.01-06 Specimens B, D, I, signed and sealed by Frank E. Grate Jr., P.E.*

**2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 09-0528.01**

**A. DRAWINGS**

1. *Drawing No. 09-088, titled "0.050" Aluminum Storm Panel", sheets 1 through 7 of 7, prepared by EngCo. Inc., dated April 30, 2009, signed and sealed by Pedro De Figueiredo, P.E., on May 05, 2009.*

  
\_\_\_\_\_  
Helmy A. Makar, P.E., M.S.  
PERA, Product Control Unit Supervisor  
NOA No. 11-1207.09  
Expiration Date: 12/07/2016  
Approval Date: 05/24/2012

**Willard Shutter Company, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *Anchor Calculations and details for 0.050" Aluminum Storm Panels, dated February 15, 2006, pages 1 through 19, prepared by Engco, Inc., signed and sealed by Pedro De Figueiredo, P.E., on February 15, 2006.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade County Building Code Compliance Office.*

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**F. OTHERS**

1. *Letter prepared by Engco, Inc., dated May 01, 2009, signed and sealed by Pedro De Figueiredo, P.E., on August 18, 2009, stating that this product is in compliance with the Florida Building Code, 2007 edition.*

**3. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 12-008, titled "0.050" Aluminum Storm Panel", sheets 1 through 7 of 7, prepared by EngCo. Inc., dated January 25, 2012, signed and sealed by Pedro De Figueiredo, P.E., on April 10, 2012.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. QUALITY ASSURANCE**


1. *By Miami-Dade County Department of Permitting, Environment, and Regulatory Affairs (PERA).*

**E. MATERIAL CERTIFICATIONS**

1. *None.*

**F. OTHERS**

1. *Letter prepared by Engco, Inc., dated January 25, 2012, signed and sealed by Pedro De Figueiredo, P.E., stating that this product is in compliance with the Florida Building Code, 2007 & 2010 editions.*



Henry A. Makar, P.E., M.S.  
PERA, Product Control Unit Supervisor  
NOA No. 11-1207.09  
Expiration Date: 12/07/2016  
Approval Date: 05/24/2012

# GENERAL NOTES: (FLORIDA BUILDING CODE 2007/2010 - HVHZ & non HVHZ)

1- THIS PRODUCT IS DESIGNED AND TESTED (TAS 201, 202, 203) IN ACCORDANCE WITH THE THE FLORIDA BUILDING CODE 2007/2010 EDITION. PRODUCT CAN BE USED WHERE CODE IS APPLICABLE INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

2- POSTING: AN EMBOSSED OR PRINTED LABEL SHALL BE PROVIDED AS PER FBC 2010 SECTION 1715.8. IT SHALL BE LOCATED ON EACH PANEL SPACED NOT MORE THAN THREE FEET AND SHALL FACE THE EXTERIOR OR OUTSIDE. LABEL SHALL PROVIDE THE FOLLOWING INFORMATION:

"WILLARD SHUTTERS - MIAMI - FLORIDA  
0.05 ALUMINUM HURRICANE PANEL  
LARGE MISSILE IMPACT RESISTANT  
MIAMI-DADE COUNTY PRODUCT APPROVED  
NOA# \_\_\_\_\_"

## 3- MATERIAL:

- 3.1 - STORM PANELS SHALL BE 0.05" ALUMINUM 5052-H32 ALLOY.  
3.2 - ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T6 OR AS INDICATED IN THIS SET OF DRAWINGS.

4- ANCHORS SHALL BE AS SHOWN ON THIS APPROVAL. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING.

5- LOADS: PROJECT DESIGNED PRESSURES, PROVIDED BY A PROFESSIONAL ARCHITECT OR ENGINEER, AS DETERMINED FROM SECTION 1620 AND ASCE 7-10 MUST BE MULTIPLIED BY 0.6 FACTOR. THE CALCULATED PROJECT PRESSURES MUST NOT EXCEED THE ALLOWABLE PRESSURES FOR EACH COMPONENT TO BE USED.

6- USE: IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, ARCHITECT OR ENGINEER OF RECORD TO VERIFY THE FOLLOWING:

- 6.1- THE STABILITY OF THE STRUCTURE WHERE THE PRODUCT IS TO BE ATTACHED INSURING PROPER ANCHORAGE.  
6.2- THE SITE SPECIFIC PROJECT CRITERIA, SUCH AS BUT NOT LIMITED TO, WIND LOADS, LOCAL CODE REQUIREMENTS, DESIGNED PRESSURES ETC.  
6.3- THAT THIS APPROVAL IS ADEQUATE TO THE SPECIFIC PROJECT

7- PANELS CAN BE OVERLAPPED TO CREATE A 1/2 PANEL INSTALLATION.

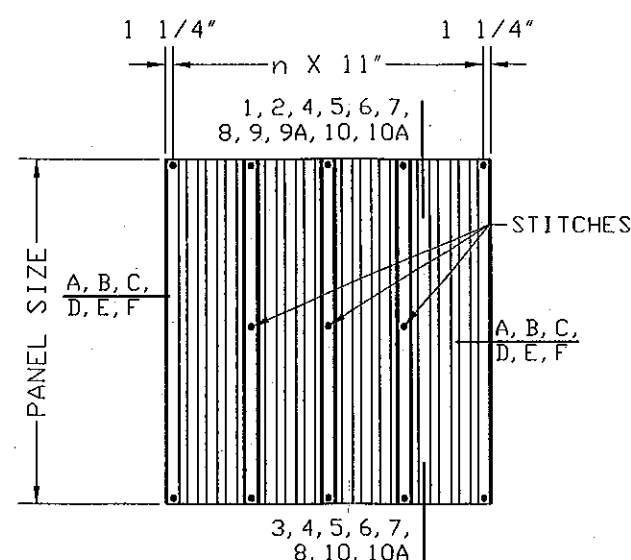
8- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL/ METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2007/2010 FBC SECTION 2003.8.4.

## TABLE OF CONTENTS:

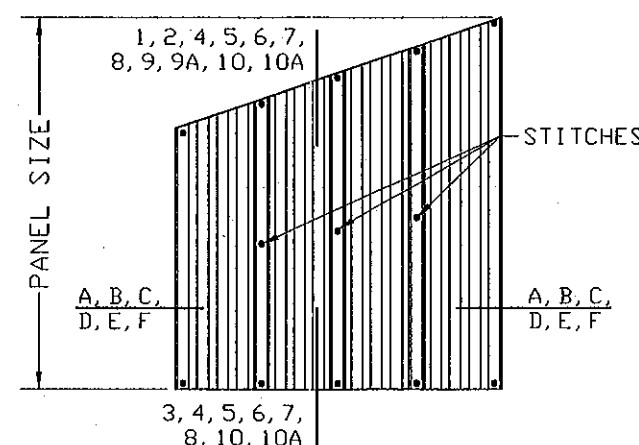
SHEET	DESCRIPTION
1	GENERAL NOTES & TYPICAL ELEVATIONS , ALLOWABLE DESIGN PRESSURES TABLE 1.
2	COMPONENTS DETAILS AND SCHEDULE
3	ANCHOR SCHEDULE AND ANCHOR TABLE 2.
4	DETAILS MOUNT TYPES 1, 2, 3, & 4
5	DETAILS MOUNT TYPES 5, 6, 7 & 8
6	DETAILS MOUNT TYPES 9, 9A, 10 & 10A
7	DETAILS SIDE CLOSURE SECTION

## TYPICAL ELEVATION

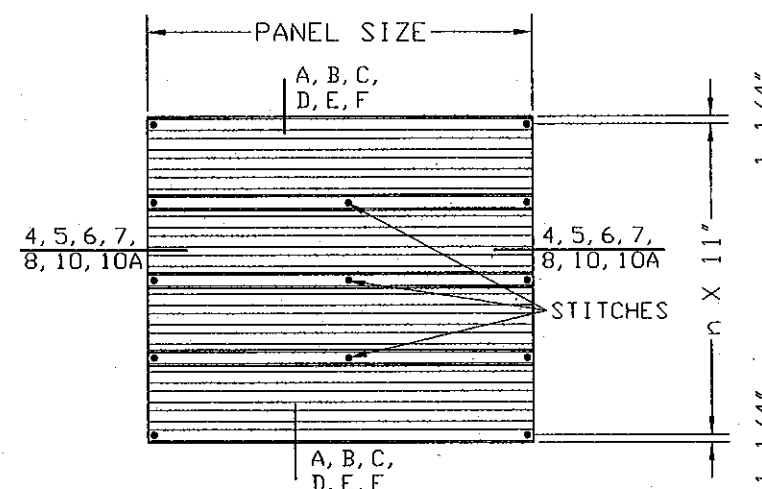
PANELS CAN BE INSTALLED  
VERTICALLY OR HORIZONTALLY USING  
APPLICABLE ANCHORING DETAILS



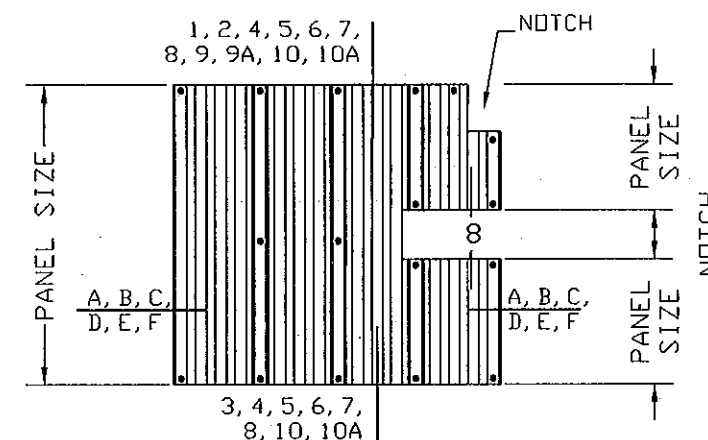
VERTICAL INSTALLATION



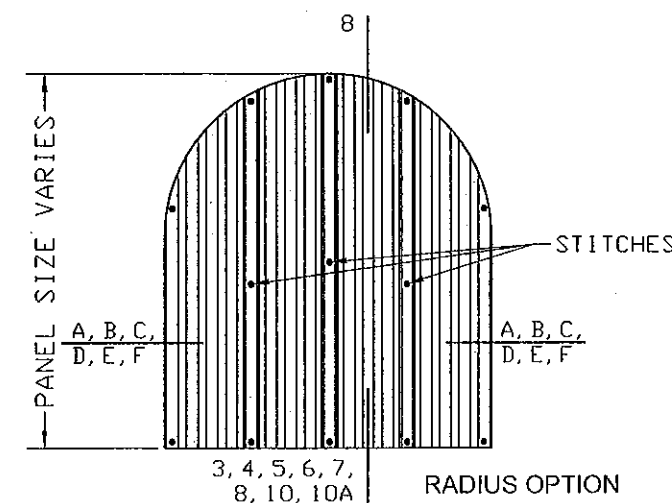
SLOPPED OPTION



HORIZONTAL INSTALLATION



NOTCHED OPTION



RADIUS OPTION

TABLE 1

PANEL ALLOWABLE DESIGNED PRESSURES:

MAX. PANEL SIZE (IN)	RATING (+/-) (PSF)
108	60
96	75
84	90
72	105
60	120

MID STITCHES ARE REQUIRED FOR PANELS GREATER THAN 54"

MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
4420 NW 35TH COURT  
MIAMI, FL 33142  
Tel.: (305) 633-0162  
Fax.: (305) 638-8634

PRODUCT:

**0.050 ALUMINUM  
STORM PANEL**

Engineering:

**EngCo Inc.**

CA 8116

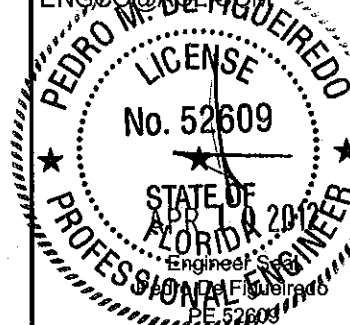
5595 Orange Dr. 201

Davie, FL 33314

Tel.: (954) 585-0304

Fax: (954) 585-0305

ENGCO@AOL.COM



MIAMI-DADE BCCO:

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1207.09  
Expiration Date 12/07/2016

By: *[Signature]*  
Miami Dade Product Control

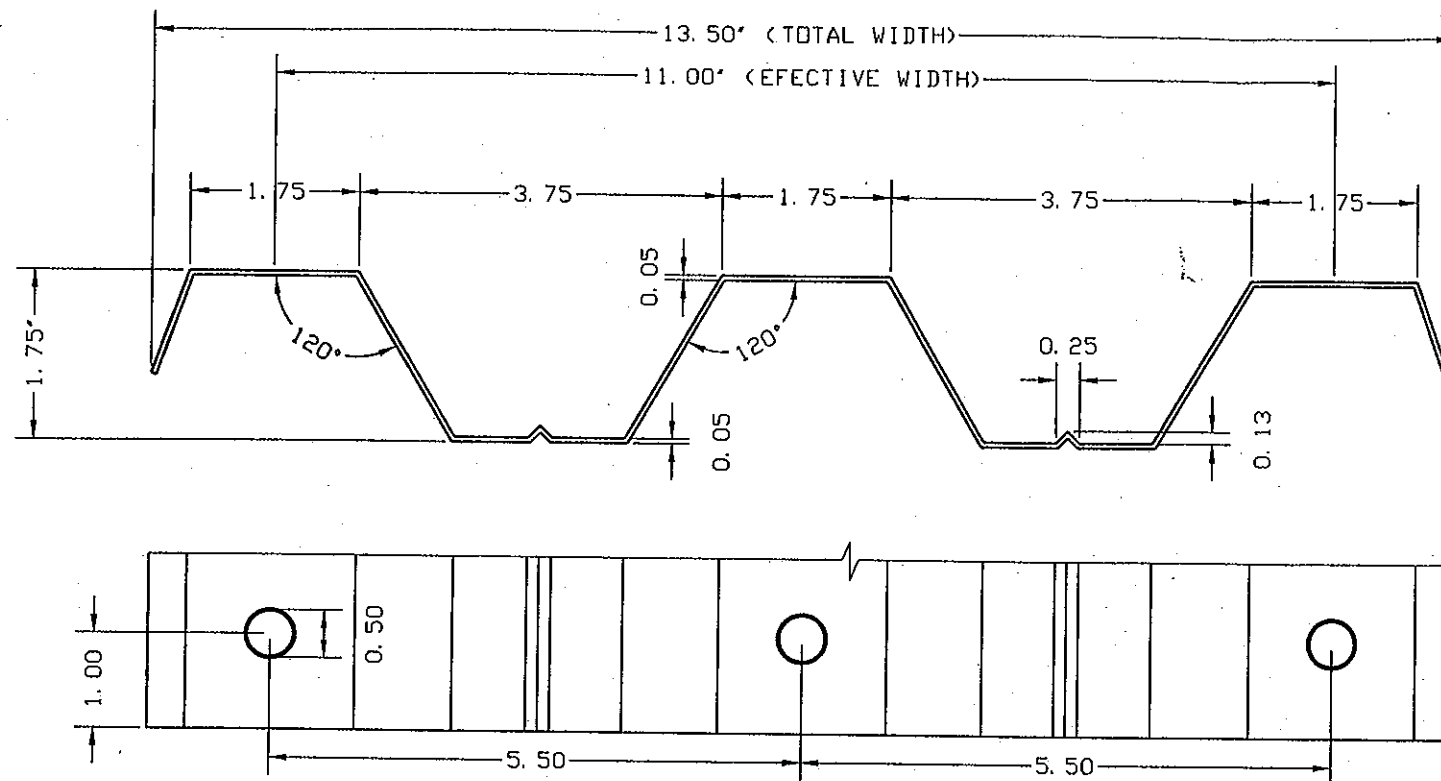
Date: 01/25/12

Scale: NA

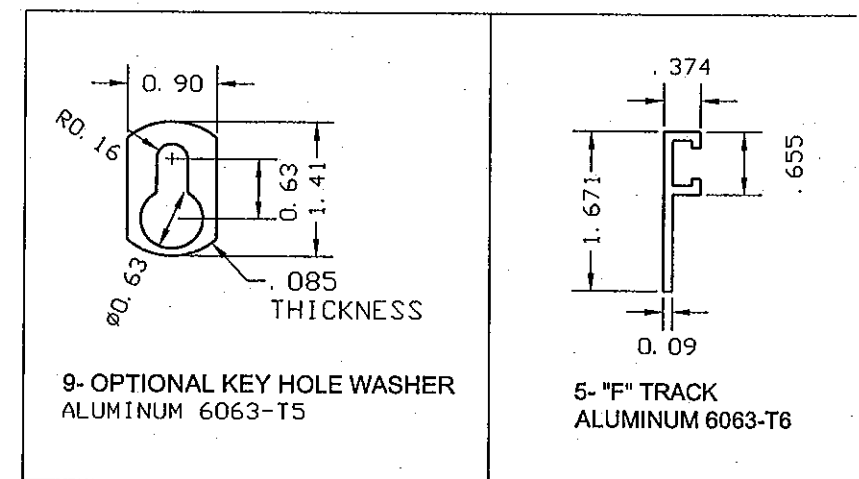
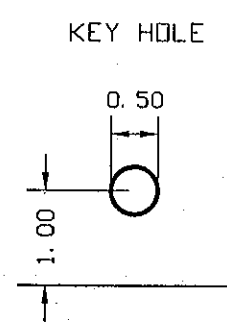
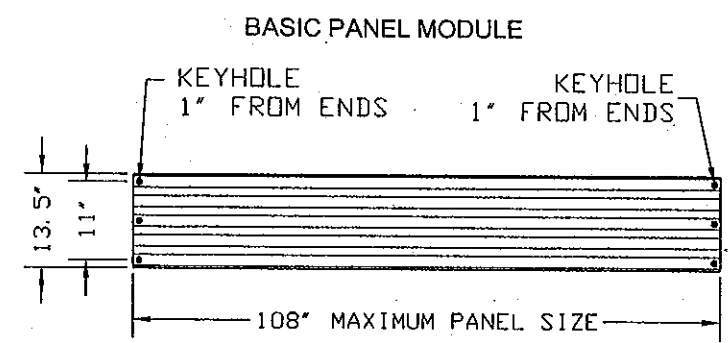
Design by: PPMF

Drawing Number  
**12-008**

SHEET  
**1 of 7**

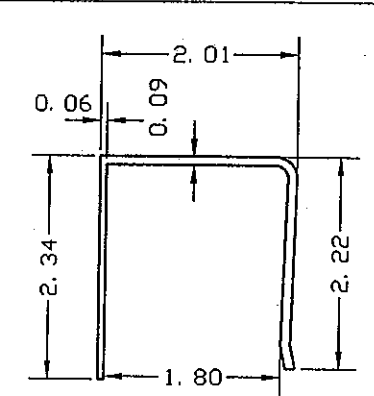


1- TYPICAL ALUMINUM PANEL  
ALUMINUM 5052-H32 ALLOY

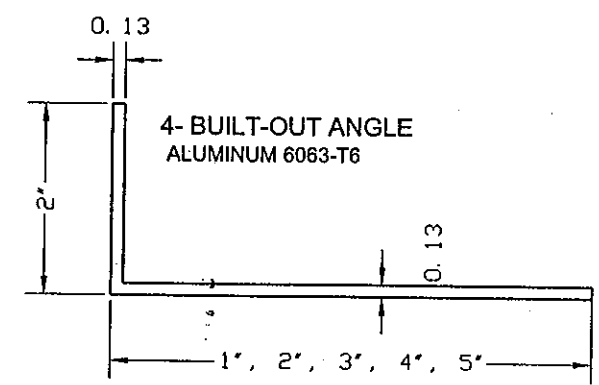


COMPONENTS SCHEDULE

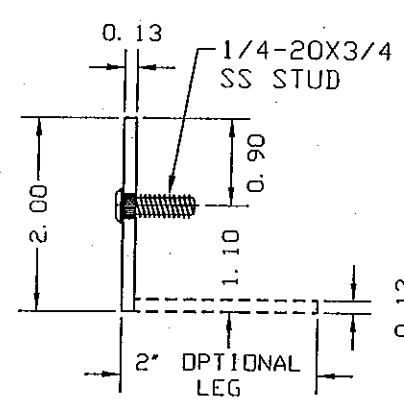
PART	DESCRIPTION	MATERIAL
1	0.05 ROLL FORMED PANEL	ALUMINUM
2	STUD ANGLE TRACK	6063-T6
3	"U" CEILING TRACK	6063-T6
4	1/8-2X BUILT-OUT ANGLE	6063-T6
5	"F" TRACK	6063-T6
6	"F BUILT-OUT" TRACK	6063-T6
7	"H" HEADER TRACK	6063-T6
8	CLIP SILL TRACK	6063-T6/ S. STEEL
9	OPTIONAL KEY HOLE WASHER	6063-T5
10	1/4-20 WASHERED WINGNUT	ZINC ALLOY
11	1/4-20 SS SIDEWALK SCREWS	STAINLESS STEEL
12	1/4-20 SS HH MACHINE SCREWS	STAINLESS STEEL
13	1/4-20 SS HH NUT	STAINLESS STEEL
14	1/4-20 SS TH MACHINE SCREWS	STAINLESS STEEL



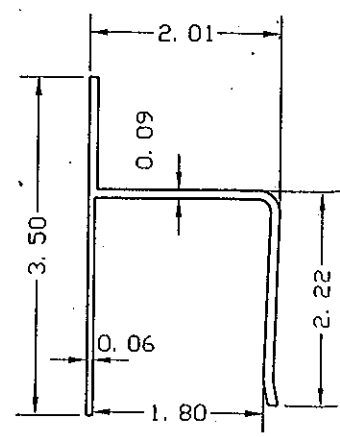
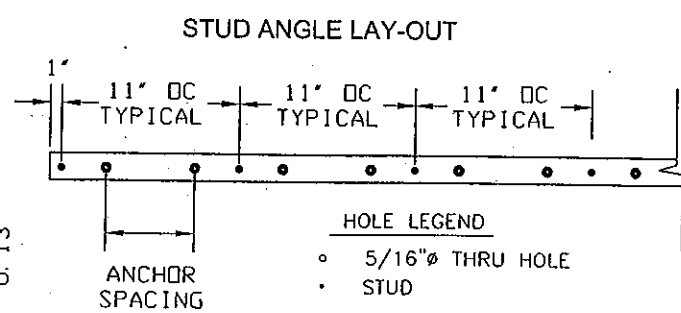
3- "U" CEILING TRACK  
ALUMINUM 6063-T6



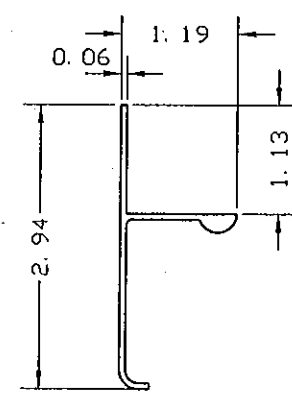
4- BUILT-OUT ANGLE  
ALUMINUM 6063-T6



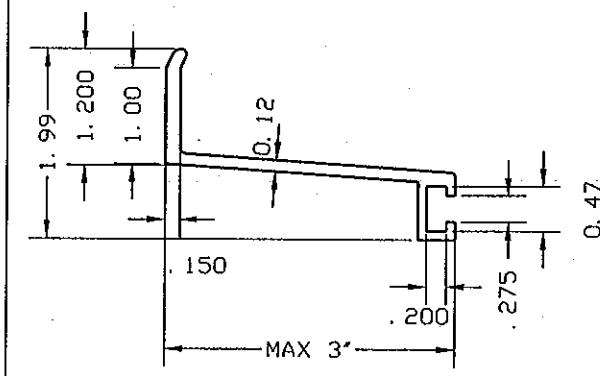
2- STUD ANGLE TRACK  
ALUMINUM 6063-T6



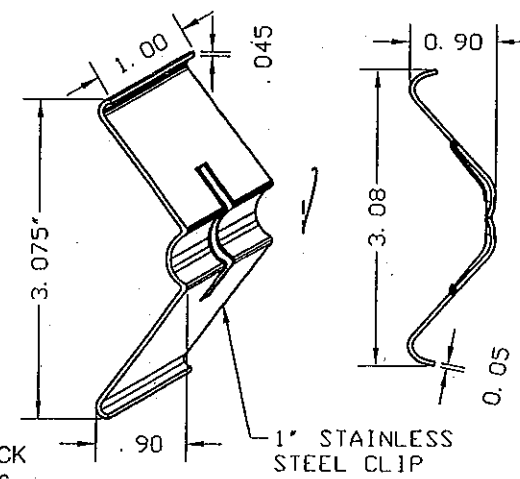
7- "H" HEADER TRACK  
ALUMINUM 6063-T6



8- "CLIP" SILL TRACK  
ALUMINUM 6063-T6



6- 1", 2", 3" "F BUILT-OUT" TRACK  
ALUMINUM 6063-T6



MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
4420 NW 35TH COURT  
MIAMI, FL 33142  
Tel.: (305) 633-0162  
Fax.: (305) 638-8634

PRODUCT:  
**0.050 ALUMINUM  
STORM PANEL**

Engineering:  
**EngCo Inc.**  
CA 8116  
5595 Orange Dr. 201  
Davie, FL 33314  
Tel.: (954) 585-0304  
Fax: (954) 585-0305  
ENGCO@AOL.COM



MIAMI-DADE BCCO:

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1207.09  
Expiration Date 12/07/2016  
By *Healy A. Miller*  
Miami Dade Product Control

Date: 01/25/12  
Scale: NA  
Design by: PPMF

Drawing Number  
**12-008**

SHEET  
**2 of 7**

TABLE 2  
MAXIMUM ANCHOR SPACING ON CENTER

MAXIMUM ANCHOR SPACING ON CENTER

MOUNT TYPE - SHEETS 4, 5 AND 6

DESIGNED PRESSURES

		60 PSF												90 PSF												120 PSF												
		1	2	3	4	5	6	7A	8	9	9A	10	10A	1	2	3	4	5	6	7A	8	9	9A	10	10A	1	2	3	4	5	6	7A	8	9	9A	10	10A	
PANEL SIZE (INCHES)	60 IN	A	11	12	12	12	12	12	11	12	12	12	12	7	10	12	10	12	8	10	11	9	12	9	12	5	7	12	7	12	6	8	11	7	12	7	12	
		A1	4	7	9	7	12	4	6	11	5	12	5	11	3	5	6	5	8	3	4	5.5	3	8	3	7	--	3	4	3	6	--	3	5.5	--	6	--	5
		A2	12	12	12	12	12	12	12	11	12	12	12	12	9	9	12	9	12	9	12	11	11	12	11	12	6	7	12	7	12	6	9	11	8	12	8	12
		B	12	12	12	12	12	12	12	11	12	12	12	12	9	10	12	10	12	9	12	11	11	12	11	12	7	7	12	8	12	7	9	11	8	12	8	12
		B1	4	7	9	7	12	4	6	11	5	12	5	11	3	5	6	5	8	3	4	5.5	3	8	3	7	--	3	4	3	6	--	3	5.5	--	6	--	5
		C	6	8	12	8	12	6	8	11	7	12	7	12	4	5	8	5	11	4	5	11	5	11	4	10	3	4	6	4	8	3	4	5.5	3	8	3	7
		D	--	--	--	--	--	--	--	11	12	12	12	12	--	--	--	--	--	--	--	11	12	12	12	12	--	--	--	--	--	--	--	11	11	12	11	12
		D1	--	--	--	--	--	--	--	11	12	12	12	12	--	--	--	--	--	--	--	11	10	12	10	12	--	--	--	--	--	--	--	11	8	12	7	12
	D2	--	--	--	--	--	--	--	11	12	12	12	12	--	--	--	--	--	--	--	11	11	12	11	12	--	--	--	--	--	--	--	11	8	12	8	12	
	84 IN	A	8	11	12	11	12	8	11	11	10	12	10	12	5	7	11	7	12	5	7	11	7	12	6	12	4	5	8	5	11	4	5	11	5	11	5	10
		A1	3	5	6	5	9	3	4	5.5	4	9	4	8	--	3	4	3	6	--	3	5.5	--	6	--	5	--	--	3	--	4	--	--	--	4	--	4	
		A2	9	10	12	10	12	9	12	11	12	12	11	12	6	6	12	6	12	6	9	11	8	12	7	12	4	5	10	5	12	4	6	11	6	12	5	12
		B	10	11	12	11	12	10	12	11	12	12	12	12	6	7	12	7	12	6	9	11	8	12	8	12	5	5	10	5	12	4	6	11	6	12	5	12
		B1	3	5	6	5	9	3	4	5.5	4	9	4	8	--	3	4	3	6	--	3	5.5	--	6	--	5	--	--	3	--	4	--	--	--	4	--	4	
		C	4	6	9	6	12	4	6	11	5	12	5	10	--	4	6	4	8	--	4	5.5	3	8	3	7	--	3	4	3	6	--	3	5.5	--	6	--	5
		D	--	--	--	--	--	--	--	11	12	12	12	12	--	--	--	--	--	--	--	11	11	12	10	12	--	--	--	--	--	--	--	11	8	12	8	12
		D1	--	--	--	--	--	--	--	11	11	12	11	12	--	--	--	--	--	--	--	11	7	12	7	12	--	--	--	--	--	--	--	11	5	12	5	11
	D2	--	--	--	--	--	--	--	11	12	12	11	12	--	--	--	--	--	--	--	11	8	12	7	12	--	--	--	--	--	--	--	11	6	12	5	12	
	108 IN	A	6	8	12	8	12	6	9	11	8	12	7	12	4	5	9	5	11	4	6	11	5	12	5	10	--	--	--	--	--	--	--	11	6	12	5	12
		A1	--	4	5	4	7	--	3	5.5	3	7	3	6	--	--	3	--	4	--	--	--	--	4	--	4	--	--	--	--	--	--	--	--	--	--	--	
		A2	7	7	12	8	12	7	10	11	9	12	9	12	5	5	10	5	12	5	7	11	6	12	6	12	--	--	--	--	--	--	--	--	--	--	--	
		B	7	8	12	8	12	7	10	11	9	12	9	12	5	5	10	5	12	5	7	11	6	12	6	12	--	--	--	--	--	--	--	--	--	--	--	
		B1	--	4	5	4	7	--	3	5.5	3	7	3	6	--	--	3	--	4	--	--	--	--	4	--	4	--	--	--	--	--	--	--	--	--	--	--	
		C	3	4	7	4	9	3	4	5.5	4	9	4	8	--	3	4	3	6	--	3	5.5	--	6	--	5	--	--	--	--	--	--	--	--	--	--		
D		--	--	--	--	--	--	--	11	12	12	12	12	--	--	--	--	--	--	--	11	8	12	8	12	--	--	--	--	--	--	--	--	--	--	--		
D1		--	--	--	--	--	--	--	11	8	12	8	12	--	--	--	--	--	--	--	11	5	12	5	11	--	--	--	--	--	--	--	--	--	--	--		
D2	--	--	--	--	--	--	--	11	9	12	9	12	--	--	--	--	--	--	--	11	6	12	6	12	--	--	--	--	--	--	--	--	--	--	--			

EXAMPLE:  
 PANEL HEIGHT: 84"  
 DESIGNED PRESSURE: Pd= 90 PSF  
 MOUNT TYPE D2 - SEE ANCHOR SCHEDULE  
 MOUNT TYPE 10A - SEE SHEET 6 OF 7  
 MAXIMUM ANCHOR SPACING: 12" OC  
 EDGE DISTANCE - 3/4"

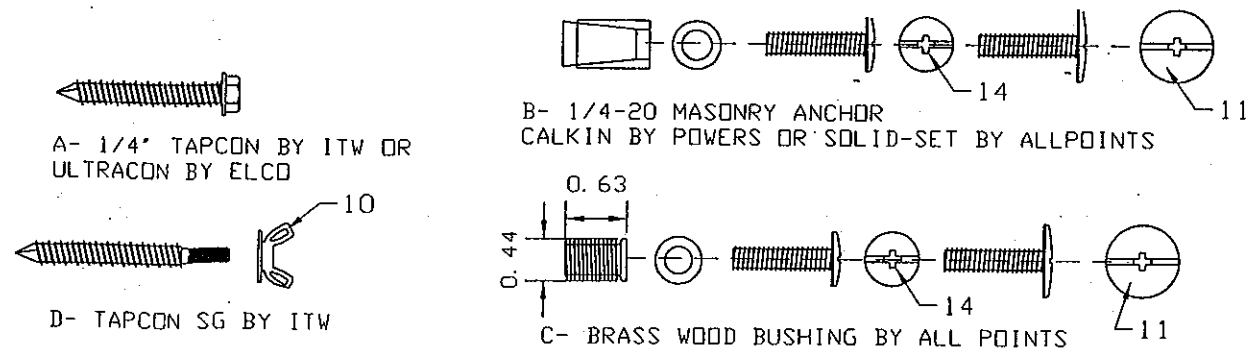
EXAMPLE:  
PANEL HEIGHT: 84"  
DESIGNED PRESSURE:  $P_d = 90$  PSF  
ANCHOR TYPE D2 - SEE ANCHOR SCHEDULE  
MOUNT TYPE 10A - SEE SHEET 6 OF 7  
MAXIMUM ANCHOR SPACING: 12" OC  
EDGE DISTANCE - 3/4"  
EMBEDMENT: 1 1/2"

NOTES:  
1- USE TABLE 2 IN CONJUNCTION WITH TABLE 1  
2- ANCHOR SPACING CAN BE CALCULATED BY INTERPOLATION BETWEEN LOAD VALUES

ANCHOR SCHEDULE:

TYPE	DESCRIPTION	EMBED.	EDGE DIST
A	1/4" TAPCONS/ ULTRACON INTO CONCRETE ( $FC' = 3192$ PSI)	1 3/4"	2 1/2"
A1	1/4" TAPCONS/ ULTRACON INTO CMU	1 1/4"	2 1/2"
A2	1/4" TAPCONS/ ULTRACON INTO WOOD ( $SG = .55$ )	1 5/8"	3/4"
B	1/4-20 MASONRY ANCHORS INTO CONCRETE ( $FC' = 3000$ PSI)	7/8"	3"
B1	1/4-20 MASONRY ANCHORS INTO CMU	7/8"	3"
C	1/4-20 WOOD BUSHING INTO WOOD ( $SG = .55$ )	3/4"	3/4"
D	1/4" TAPCON SG INTO CONCRETE ( $FC' = 3295$ PSI)	1 3/4"	2 1/2"
D1	1/4" TAPCON SG INTO CMU	1 1/4"	2 1/2"
D2	1/4" TAPCON SG INTO 2X6 SOUTHERN PINE WOOD ( $SG = .55$ )	1 1/2"	3/4"

NOTES:  
1- EMBEDMENT IS BEYOND WALL DRESSING.  
2- USE THIS ANCHOR SCHEDULE WITH TABLE 2  
3- ANCHORS D, D1 AND D2 REQUIRE STRUCTURAL INSPECTION



MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
4420 NW 35TH COURT  
MIAMI, FL 33142  
Tel.: (305) 633-0162  
Fax.: (305) 638-8634

PRODUCT:  
**0.050 ALUMINUM  
STORM PANEL**

Engineering:  
**EngCo Inc.**  
CA 8116  
5595 Orange Dr. 201  
Davie, FL 33314  
Tel.: (954) 585-0304  
Fax: (954) 585-0305  
ENGCO@AOL.COM



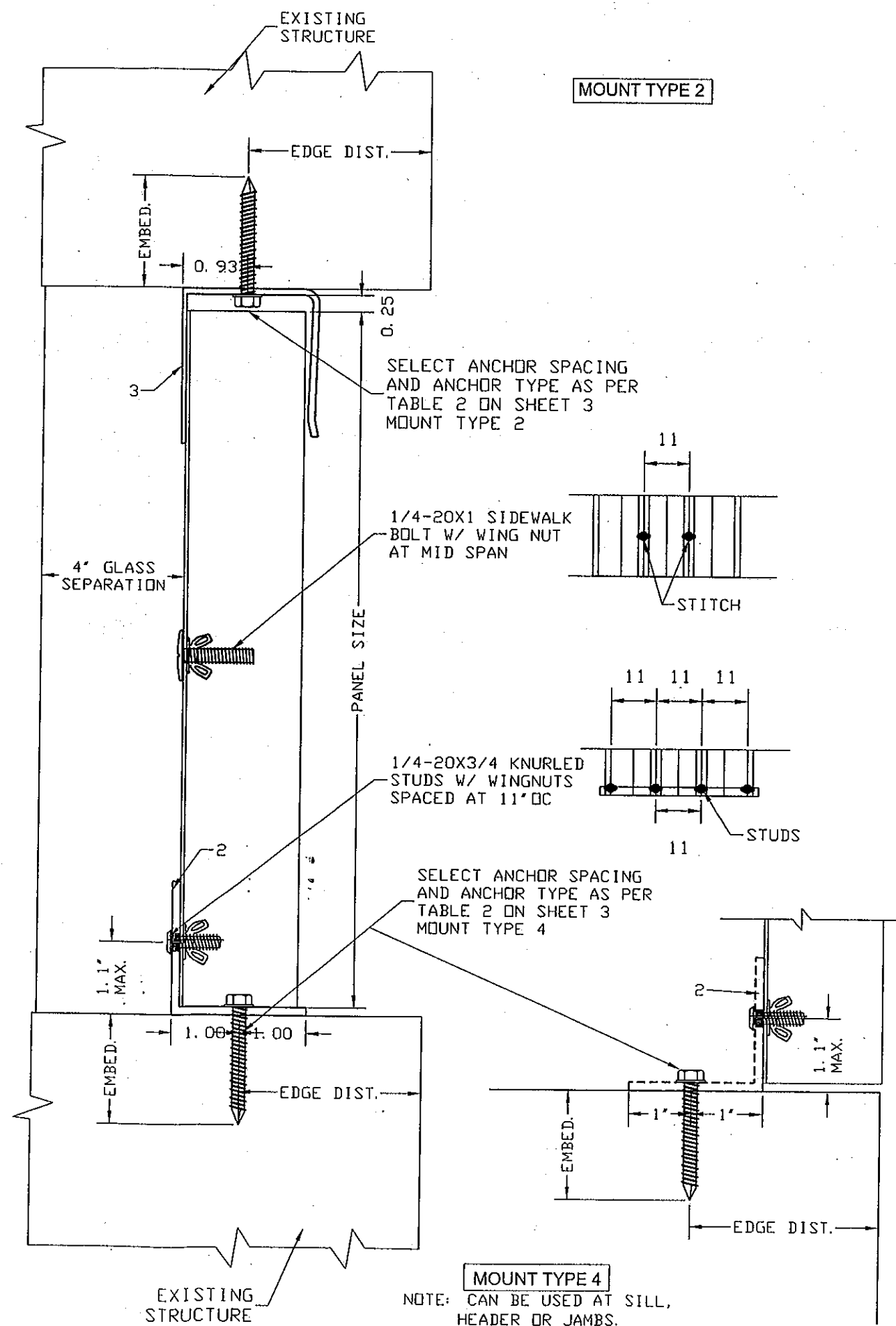
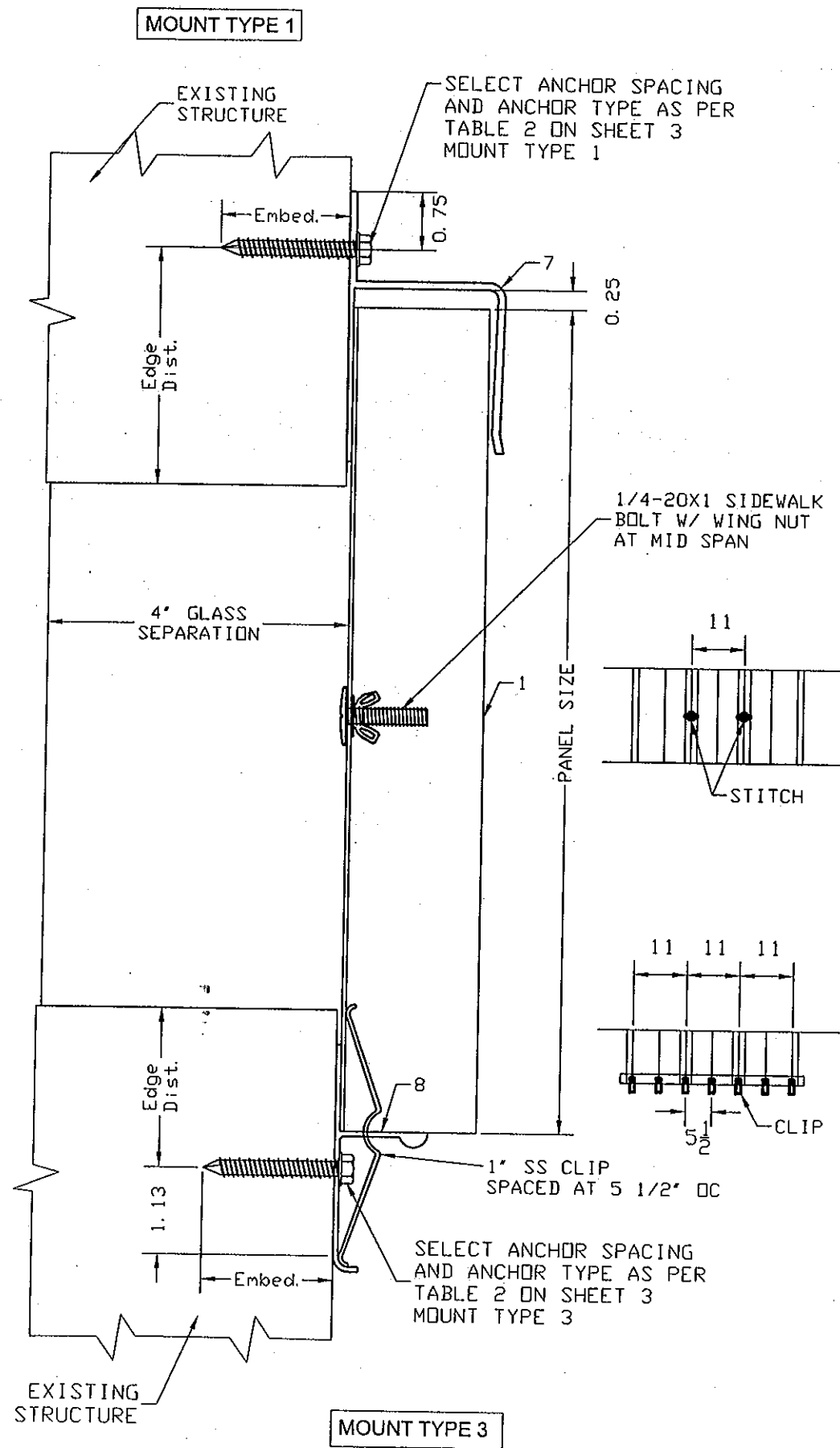
MIAMI-DADE BCCO:

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1207.09  
Expiration Date 12/07/2016  
By *Helmy A. M. M.*  
Miami Dade Product Control

Date: 01/25/12  
Scale: NA  
Design by: PPMF

Drawing Number  
**12-008**

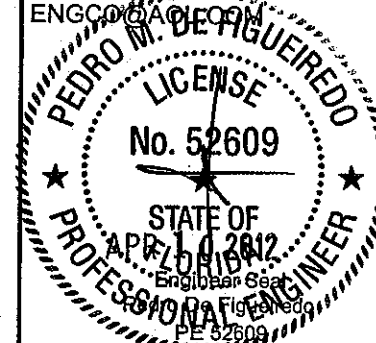
SHEET  
**3 of 7**



MANUFACTURER:  
**WILLARD**  
 SHUTTER COMPANY, INC.  
 4420 NW 35TH COURT  
 MIAMI, FL 33142  
 Tel.: (305) 633-0162  
 Fax.: (305) 638-8634

PRODUCT:  
**0.050 ALUMINUM  
 STORM PANEL**

Engineering:  
**EngCo Inc.**  
 CA 8116  
 5595 Orange Dr. 201  
 Davie, FL 33314  
 Tel.: (954) 585-0304  
 Fax: (954) 585-0305  
 ENGCORP.COM



MIAMI-DADE BCCO:

PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No **11-1207.09**  
 Expiration Date **12/07/2016**  
 By *Healy A. Healy*  
 Miami Dade Product Control

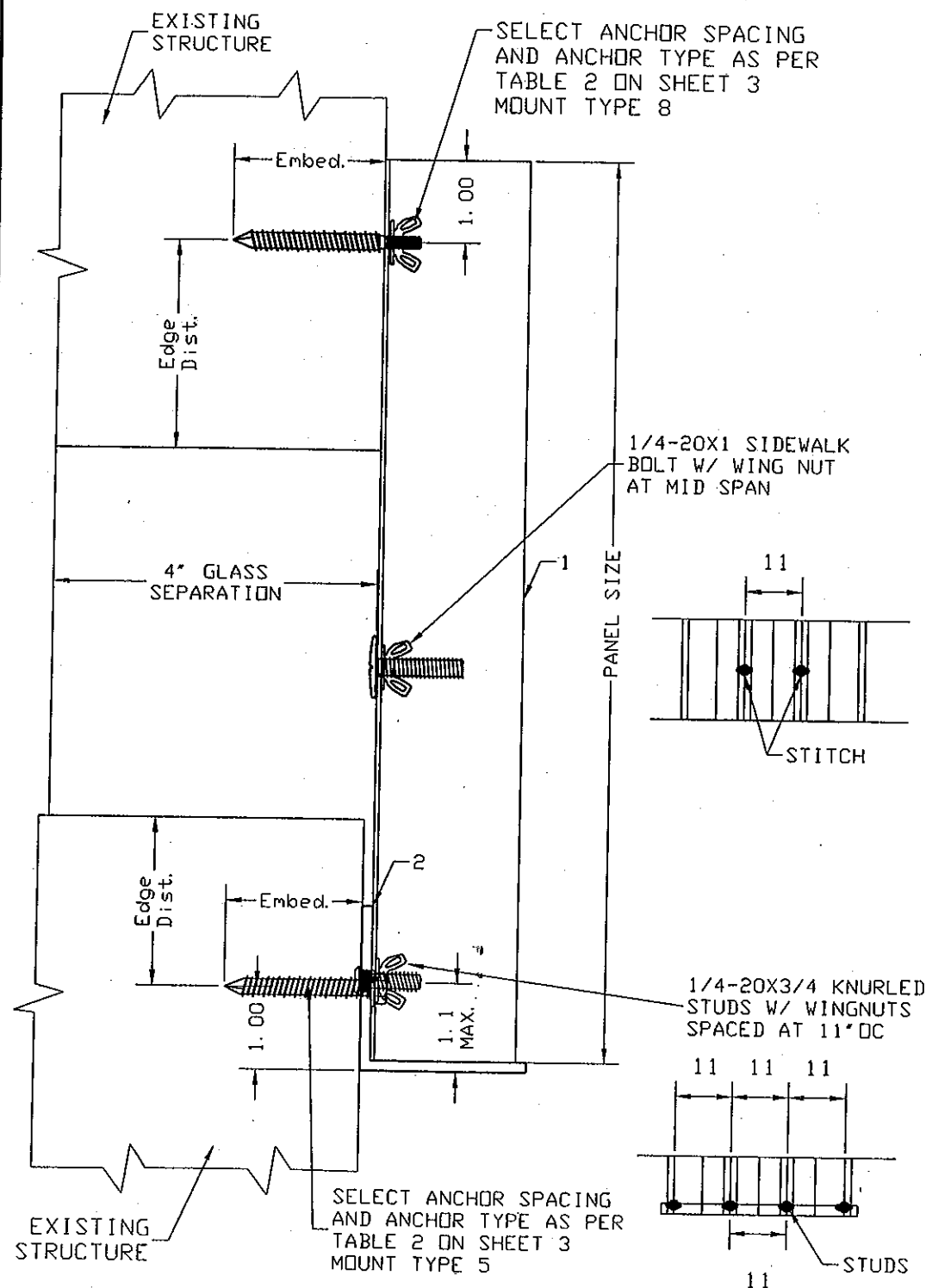
Date: 01/25/12  
 Scale: NA  
 Design by: PPMF

Drawing Number  
**12-008**

SHEET  
**4 of 7**

# MOUNT TYPE 8

NOTE: CAN BE USED AT  
SILL, HEADER OR JAMBS.



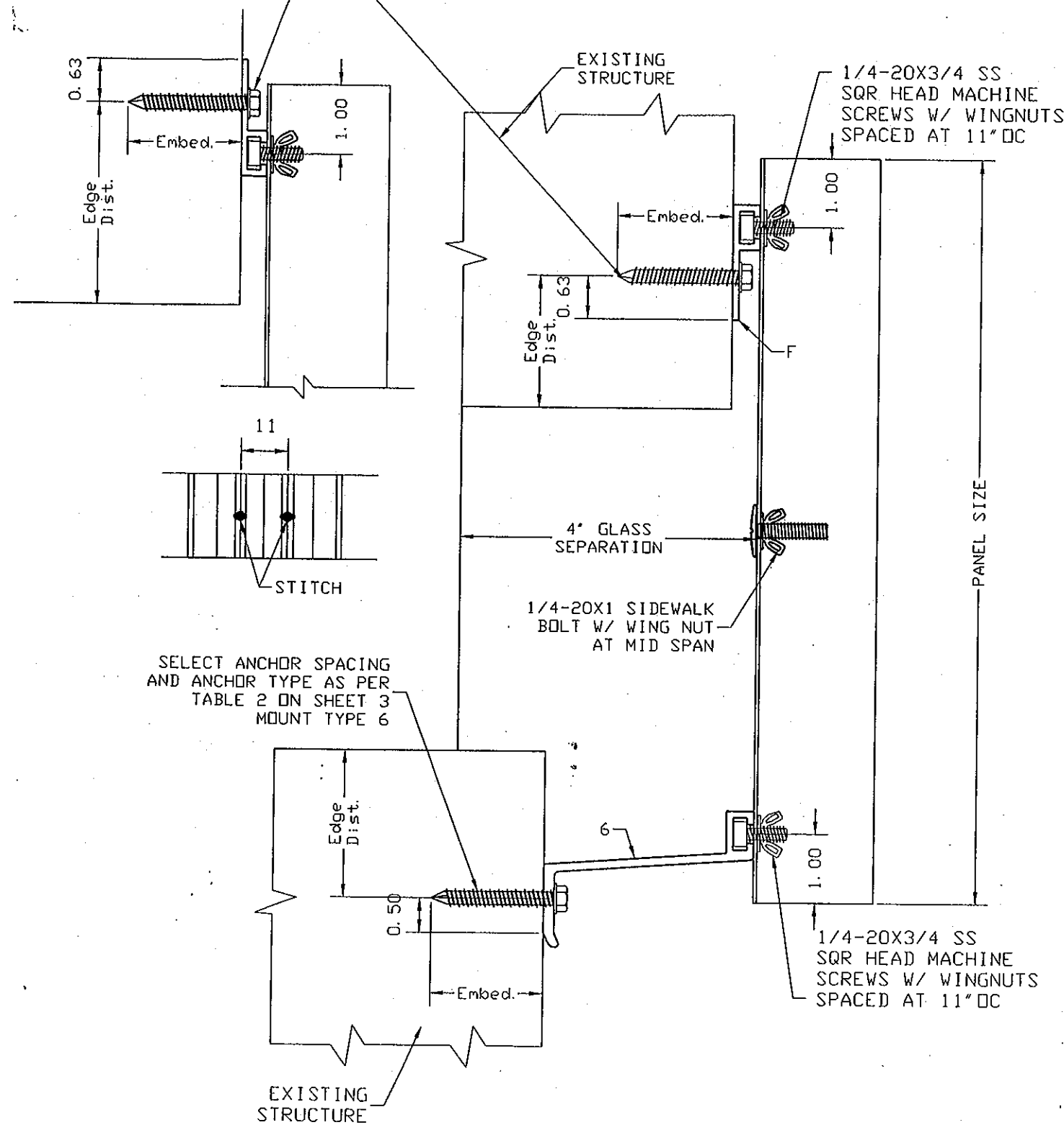
# MOUNT TYPE 5

NOTE: CAN BE USED AT  
SILL, HEADER OR JAMBS.

SELECT ANCHOR SPACING  
AND ANCHOR TYPE AS PER  
TABLE 2 ON SHEET 3  
MOUNT TYPE 7

# MOUNT TYPE 7

NOTE: CAN BE USED AT  
SILL, HEADER OR JAMBS.



# MOUNT TYPE 6

NOTE: CAN BE USED AT  
SILL, HEADER OR JAMBS.

MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
4420 NW 35TH COURT  
MIAMI, FL 33142  
Tel.: (305) 633-0162  
Fax.: (305) 638-8634

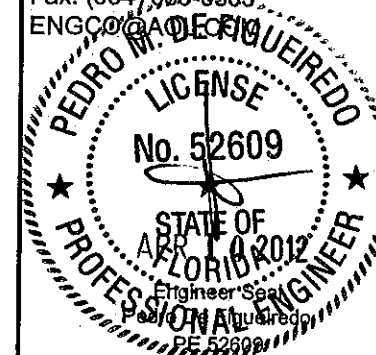
PRODUCT:

**0.050 ALUMINUM  
STORM PANEL**

Engineering:

**EngCo Inc.**

CA 8116  
5595 Orange Dr. 201  
Davie, FL 33314  
Tel.: (954) 585-0304  
Fax: (954) 585-0305  
ENGCO@AOL.COM



MIAMI-DADE BCCO:

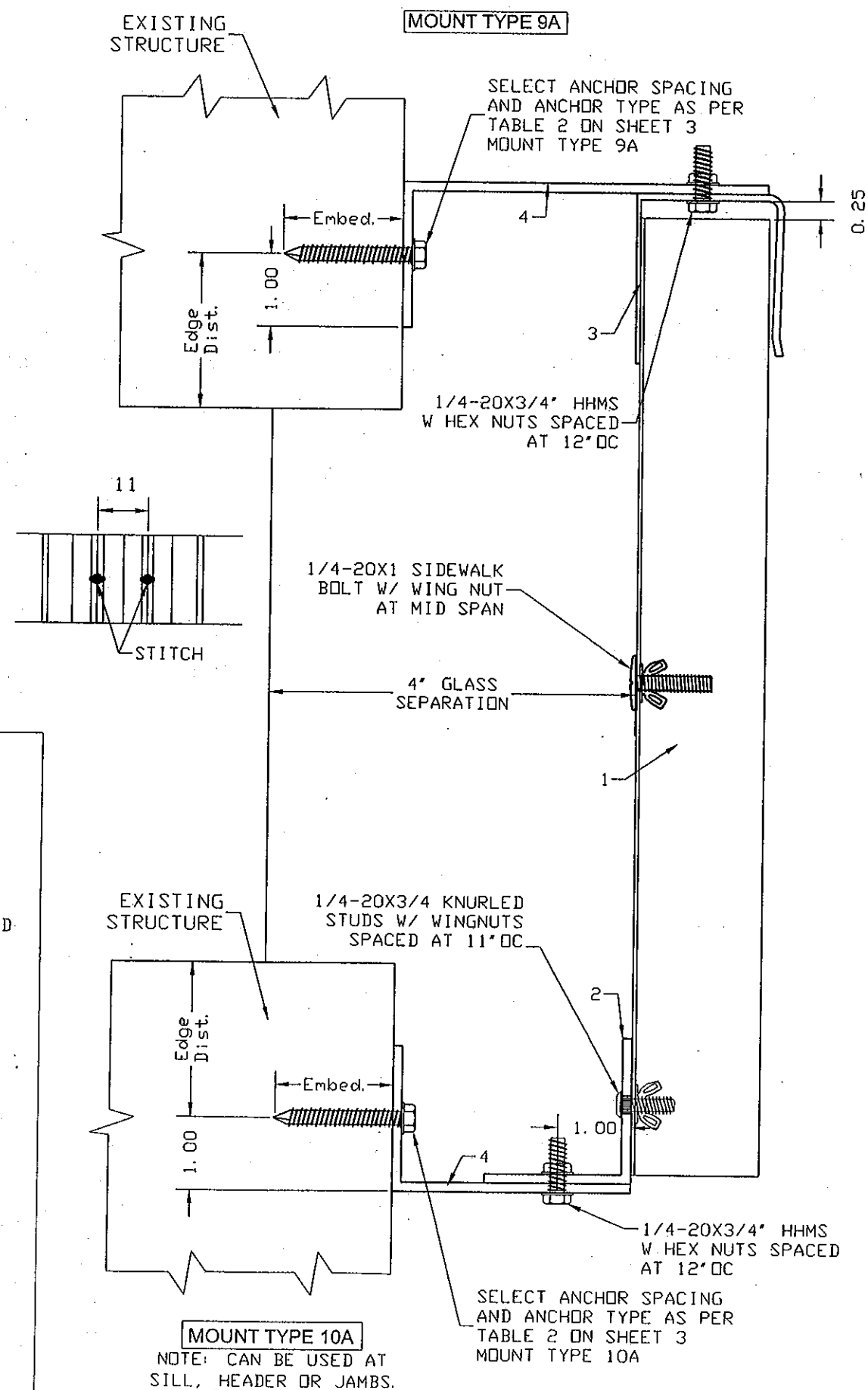
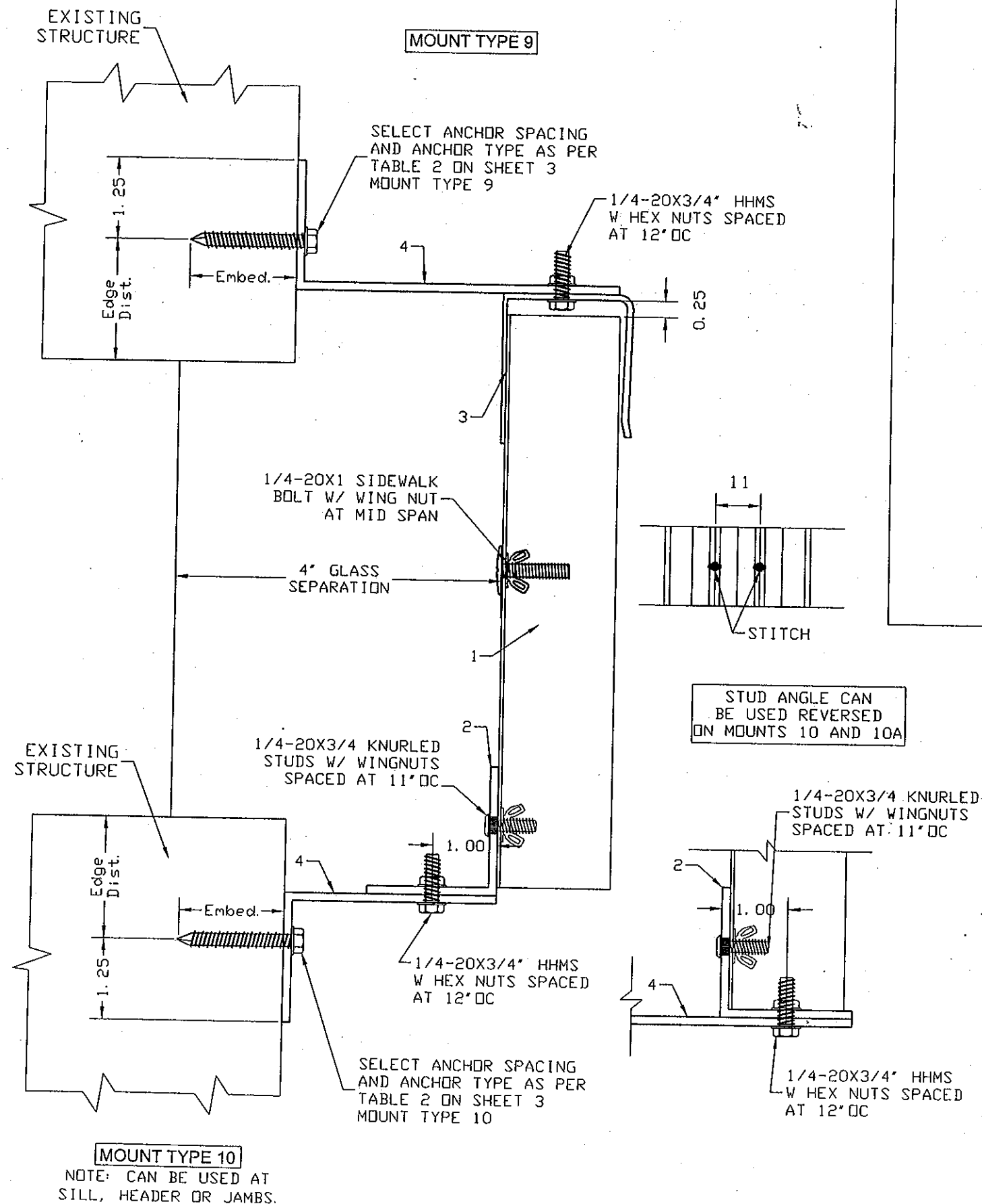
PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 11-1207-09  
Expiration Date 12/07/2016  
By *Heather A. Miller*  
Miami Dade Product Control

Date: 01/25/12  
Scale: NA  
Design by: PPMF

Drawing Number  
**12-008**

SHEET  
**5 of 7**





MANUFACTURER:  
**WILLARD**  
 SHUTTER COMPANY, INC.  
 4420 NW 35TH COURT  
 MIAMI, FL 33142  
 Tel.: (305) 633-0162  
 Fax.: (305) 638-8634

PRODUCT:  
**0.050 ALUMINUM  
 STORM PANEL**

Engineering:  
**EngCo Inc.**  
 CA 8116  
 5595 Orange Dr. 201  
 Davie, FL 33314  
 Tel.: (954) 585-0304  
 Fax: (954) 585-0305  
 ENGCO@AOL.COM



MIAMI-DADE BCCO:

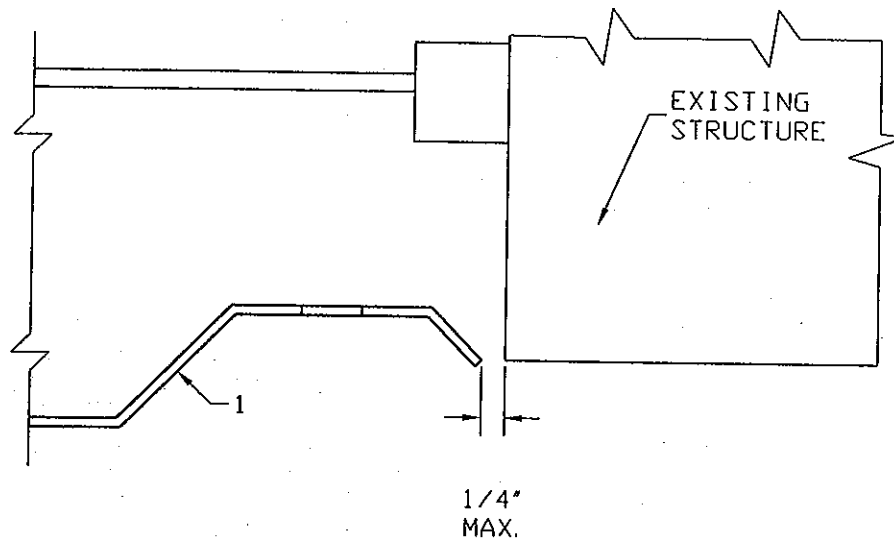
PRODUCT REVISED  
 as complying with the Florida  
 Building Code  
 Acceptance No 11-1207.09  
 Expiration Date 12/07/2016  
 By *Healy A. Healy*  
 Miami Dade Product Control

Date: 01/25/12  
 Scale: NA  
 Design by: PPMF

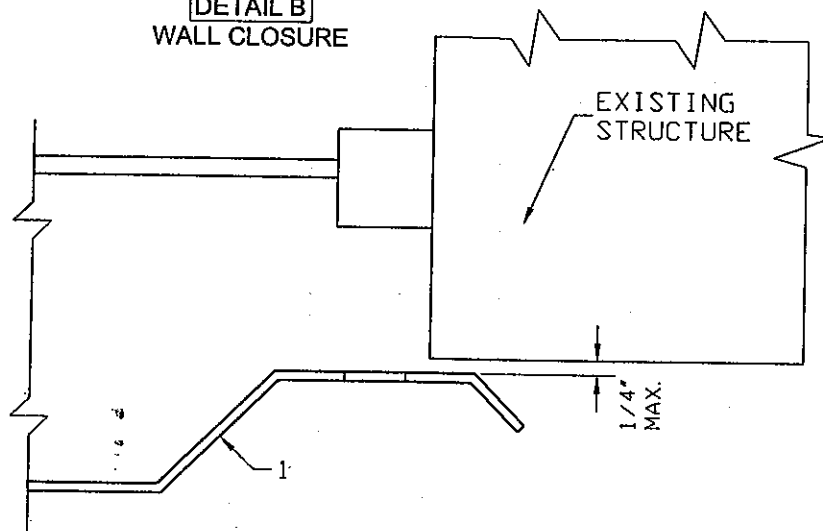
Drawing Number  
**12-008**

SHEET  
**6 of 7**

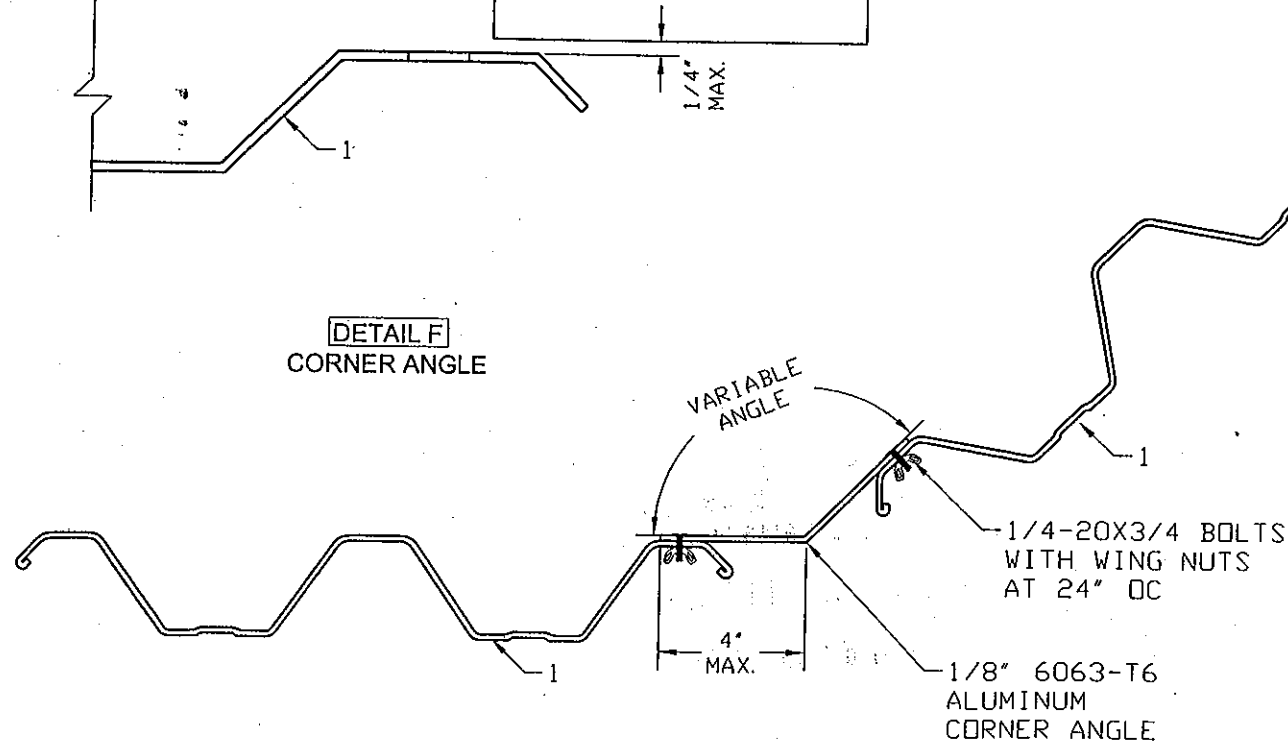
**DETAIL A**  
INSET CLOSURE



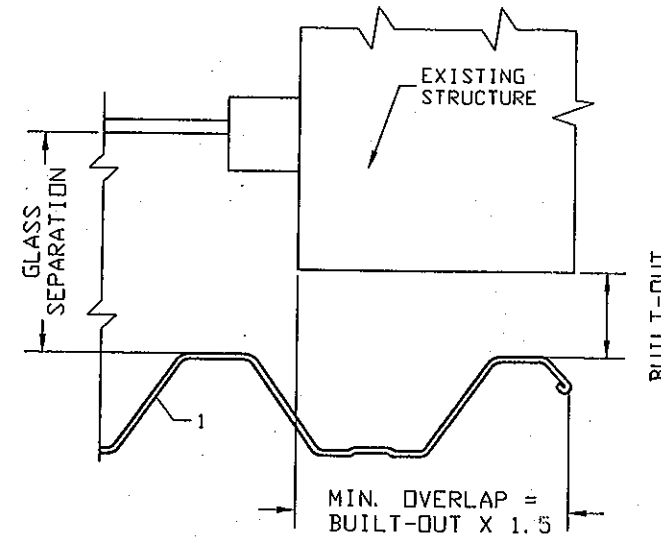
**DETAIL B**  
WALL CLOSURE



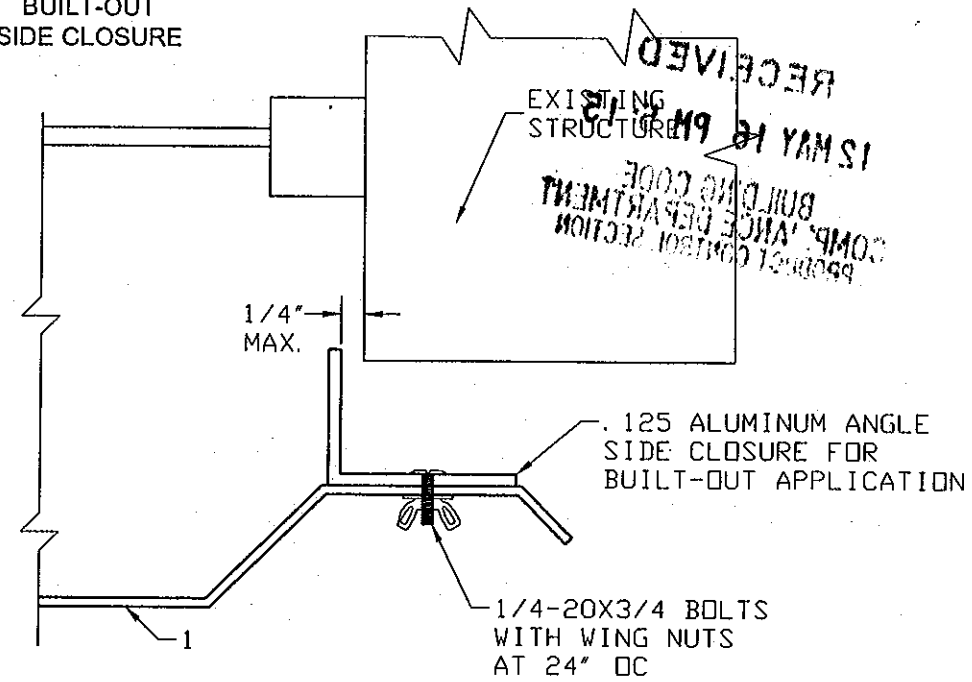
**DETAIL F**  
CORNER ANGLE



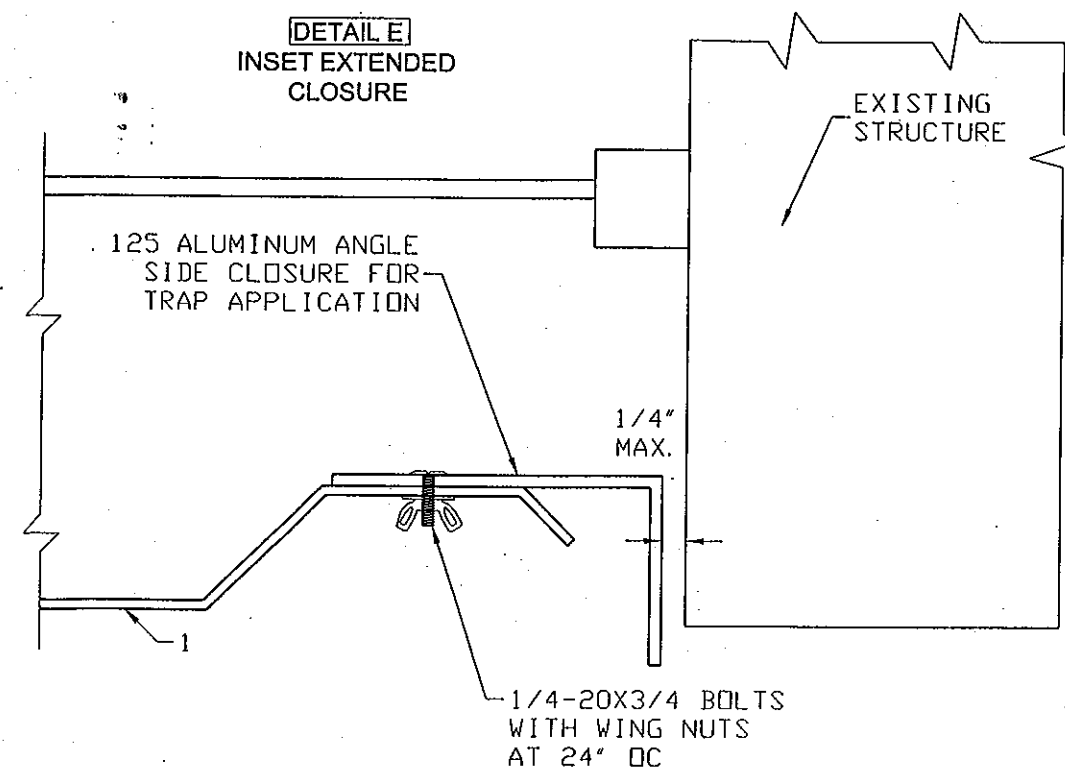
**DETAIL C**  
WALL OVERLAP



**DETAIL D**  
BUILT-OUT  
SIDE CLOSURE



**DETAIL E**  
INSET EXTENDED  
CLOSURE



FBC 2007/2010 SECTION 2413.7:  
\*STORM SHUTTERS MUST COMPLETELY COVER AN OPENING IN ALL DIRECTIONS. THE MAXIMUM SIDE CLEARANCE BETWEEN THE SHUTTER AND A WALL OR INSET SURFACE SHALL BE 1/4" (DETAILS A & B). ANY DISTANCE IN EXCESS OF 1/4" SHALL REQUIRE END CLOSURE (DETAILS D & E) OR SHUTTER OVERLAP (DETAIL C), WHERE APPLICABLE. SHUTTER OVERLAP SHALL BE A MINIMUM OF 1.5 TIMES THE SIDE CLEARANCE BETWEEN THE SHUTTER AND WALL.

MANUFACTURER:  
**WILLARD**  
SHUTTER COMPANY, INC.  
4420 NW 35TH COURT  
MIAMI, FL 33142  
Tel.: (305) 633-0162  
Fax.: (305) 638-8634

PRODUCT:  
**0.050 ALUMINUM  
STORM PANEL**

Engineering:  
**EngCo Inc.**  
CA 8116  
5595 Orange Dr. 201  
Davie, FL 33314  
Tel.: (954) 585-0304  
Fax: (954) 585-0305  
ENGCO@AOL.COM



MIAMI-DADE BCCO:

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No 11-1207.09  
Expiration Date 12/07/2016  
By *Helena A. Neri*  
Miami Dade Product Control

Date: 01/25/12  
Scale: NA  
Design by: PPMF

Drawing Number  
**12-008**

SHEET  
**7 of 7**